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INVESTOR IN PEOPLE

The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ

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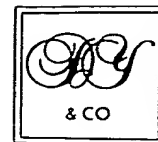
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150EC99 E499231-1 003046  
F01/7700 0.00-9929517.2

# Request for a grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
Gwent NP9 1RH

1. Your reference P/6384.GB MKH (C.331)
2. Patent application number  
(The Patent Office number) 9929517.2  
13 DEC 1999
3. Full name, address and postcode of the or of each applicant  
(underline all surnames)  
  
BRISTOL-MYERS SQUIBB COMPANY  
P.O. BOX 4000  
PRINCETON, NEW JERSEY 08543-4000  
UNITED STATES OF AMERICA  
  
Patents ADP number (if you know it)  
  
If the applicant is a corporate body, give the country/state of its incorporation  
DELAWARE, UNITED STATES OF AMERICA
4. Title of the invention  
  
OSTOMY COUPLING
5. Name of your agent (if you have one) *See F.51/77 8/9/92*  
"Address for service" in the United Kingdom to which all correspondence should be sent  
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~~EC4A 1DA~~ *Northburgh Street*  
*London EU OJP.*  
~~59006~~
6. If you are declaring priority from one or more earlier patent applications, give the country and date of filing of the or each of these earlier applications and (if you know it) the or each application number  

Country	Priority application number (if you know it)	Date of filing (day/month/year)
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7. If this application is divided or otherwise derived from an earlier UK application, give the number and filing date of the earlier application  

Number of earlier application	Date of filing (day/month/year)
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8. Is a statement of inventorship and of right to grant of a patent required support of this request? (Answer 'Yes' if:  
a) any applicant named in part 3 is not an inventor, or  
b) there is an inventor who is not named as an applicant, or  
c) any named applicant is a corporate body.  
See note (d))

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Continuation sheets of this form --

Description 3

Claims(s) 1

Abstract

Drawing(s) 515

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11. I/We request the grant of a patent on the basis of this application.

Signature

Date

D. Young & Co.

D YOUNG & CO

Agents for the Applicants

13.12.99

12. Name and daytime telephone number of the person to contact in the United Kingdom

MILES K. HOLMES

020 7353 4343

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### Ostomy Coupling

This invention relates to the field of ostomy products; and in particular to a coupling for releasably attaching an ostomy pouch to a pad or wafer worn on the body. The term "ostomy" is intended to be interpreted broadly, and includes colostomy, urostomy and ileostomy.

The invention relates to a type of coupling in which a deformable ring, for example, a split ring (or a ring which behaves substantially as a split ring) is used to fasten two coupling members together. The ring can be deformed to permit separation of the coupling members. Such a principle is described, for example, in GB-A-2301533, GB-A-2299761, and EP-A-0737456; the full contents of these applications are explicitly included herein as if set out here in full.

In the following summaries, the reference numerals in brackets refer, by way of example only, to features illustrated in the accompanying drawings. The reference numerals are not intended to limit the scopes of the summaries.

In one aspect of the invention, a coupling member (10; 40) comprises a channel region (12), a first wall (14) of the channel tapering in a curved taper towards the second wall such that the width of the channel narrows with a curved taper towards the channel floor.

Preferably, the channel (12) is wider (at least at one point) than it is deep.

Preferably, the channel (12) is substantially continuous, although it could be discontinuous (e.g. channel segments).

Preferably, the channel (12) is generally annular.

In another aspect, a coupling member (30) comprises an annular seal (32) having a curved configuration.

Preferably, the seal (32) comprises a sealing wiper.

In another aspect, the invention provides an ostomy coupling comprising a first coupling member (10; 40) releasably securable to a second coupling (30) member by means of a deformable coupling ring (20; 50) carried by one (10; 40) of the coupling members, the first coupling member (10; 40) comprising a channel (12) for receiving a rim (34) of the second coupling member (30), the rim (34) carrying a sealing wiper

(32), and wherein a first wall (14) of the channel tapers with a curved taper to provide a generally curved seat for the sealing wiper (32) when the coupling members are secured together.

In another aspect, the invention provides an ostomy coupling member (10) having an annular channel (16) extending radially inwardly from the side of the coupling member (10), the coupling member (10) carrying a deformable ring or split ring (20) received within the channel (16), wherein the ring (or split ring) (20) is shaped to form a generally smooth outer contour with the coupling member (10).

Preferably, the ring (20) has a tapered outer surface (22). Preferably, the contour or profile of the coupling member (10) with the ring (20) mounted thereon is trapezoid.

Preferably, the ring (20) comprises at least one projection (24) for projecting through an aperture (18) in the coupling member.

Preferably, the coupling member (10) comprises a second channel (12), and the aperture or apertures (18) communicate with the second channel (12).

Preferably, the ring is, or behaves substantially as, a split ring (20).

In another aspect, the invention provides a coupling member (40) comprising at least one generally radially projecting guide (42), the coupling member (40) carrying a deformable ring or split ring (50) mounted on the guide (42), the ring (or split ring) (50) having channel means (52) therein for receiving the guide (42), such that portions of the ring (50) fit on either side of the guide (42) to hold the ring (50) captive on the guide (42).

Preferably, the ring is, or behaves substantially as, a split ring (50).

Preferably, each arm of the split ring (50) is bifurcated to form the channel means (52).

The above aspects may be used independently or in combination.

Embodiments of the invention are illustrated, by way of example only, in the accompanying drawings, in which:

Fig. 1 shows various views of a first embodiment of plastics bodyside coupling member (40) having a curved profile coupling channel (12), and a generally radially projecting guide (42).



Fig. 2 shows various views of a plastics split locking ring (50) for fitting around the guide (42) of the coupling member of Fig. 1. The ring has locking projections (54) which project through apertures (44) into the coupling channel (12);

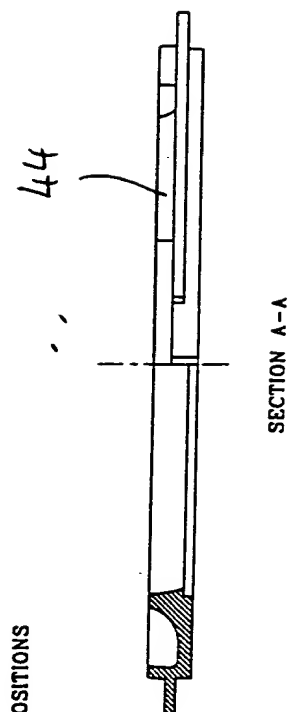
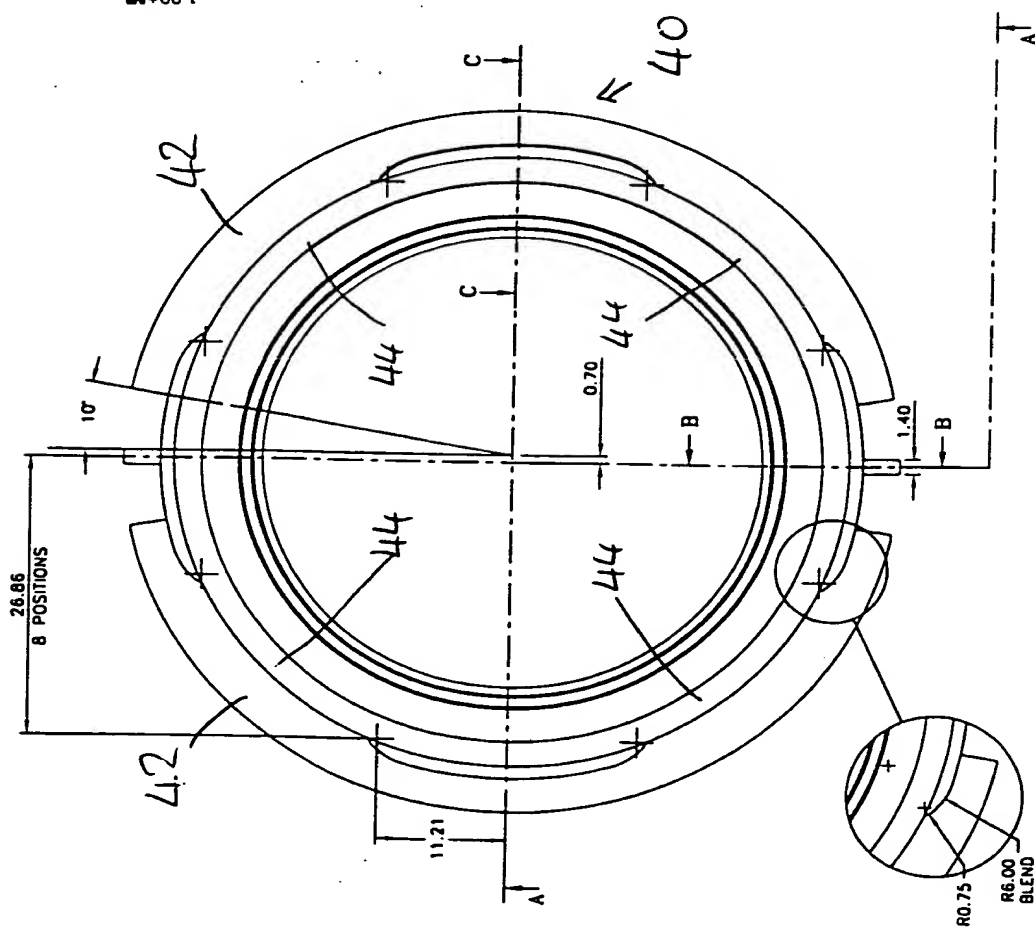
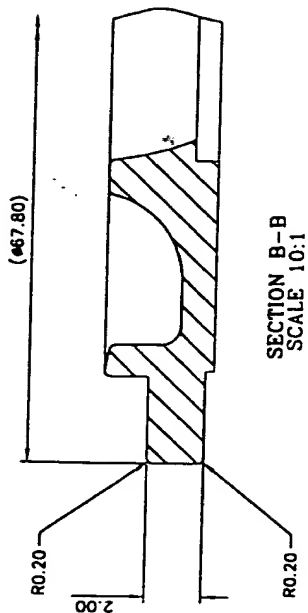
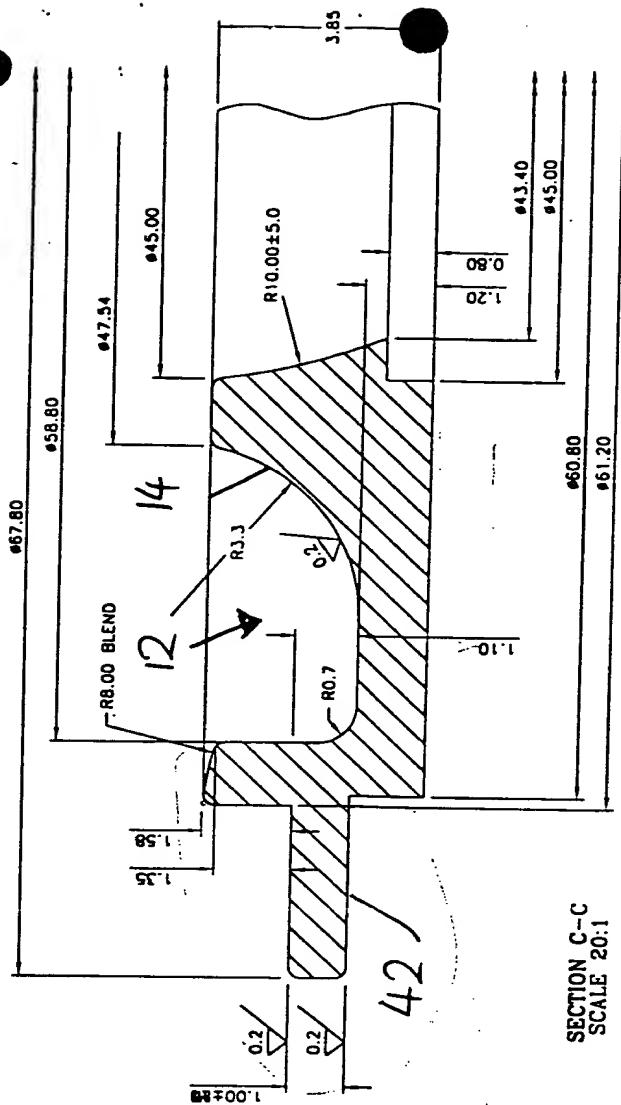
5 Fig. 3 shows various views of a second embodiment of plastics bodyside coupling member (10) having a curved profile coupling channel (12), and an outer channel (16) for receiving a locking ring (20);

Fig. 4 shows various views of a split locking ring (20) for fitting to the outer channel (16) of the coupling member of Fig. 3. The ring has locking projections (24) which project through apertures (18) into the coupling channel (12); and

10 Fig. 5 shows various views of a bagside coupling member (30) usable with the bodyside coupling members of any preceding Figure. The bagside coupling member has a rim (34) carrying a deflectable sealing wiper (32) having a curved profile. When the rim (34) and the wiper (32) are received in the coupling channel (12), the channel provides a curved seal seat for the sealing wiper. The rim (34) also has an undercut  
15 projection (36) for co-operating with the locking projections of the locking rings. The bagside coupling member (30) includes an integral finger tab (38) for ease of manipulation during assembly and disassembly of the coupling.

It will be appreciated that the foregoing description is by way of example only and that many modifications may be made using the principles of the invention. The  
20 Applicant claims protection for any novel feature or idea described herein and/or illustrated in the drawings whether or not emphasis has been placed thereon.

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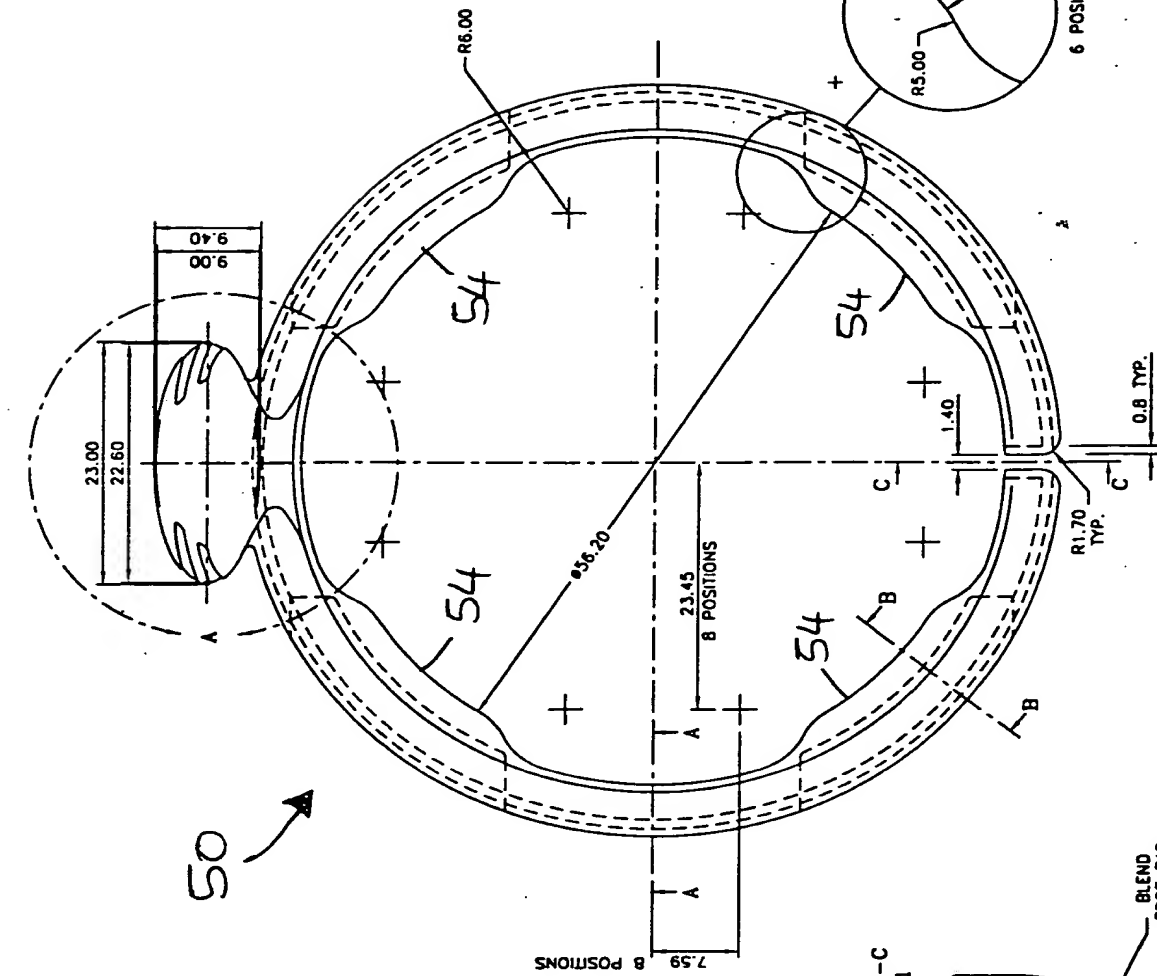
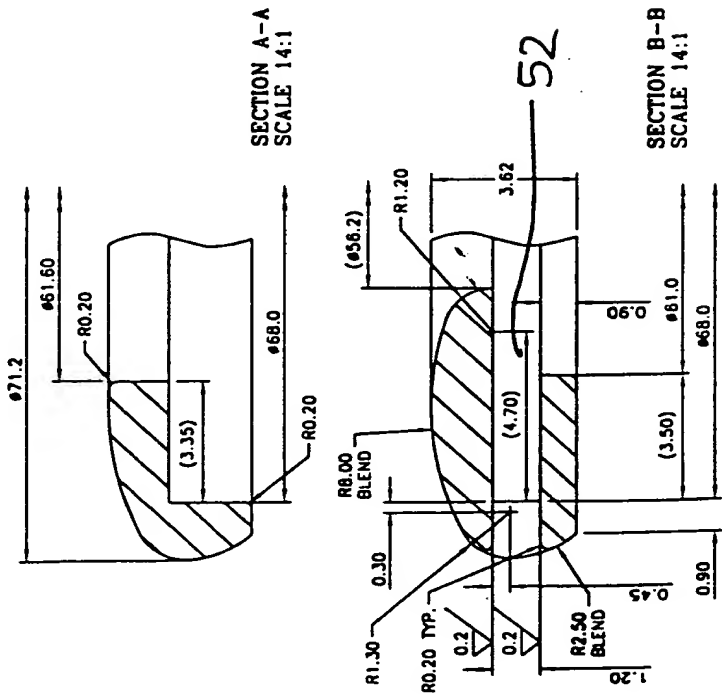
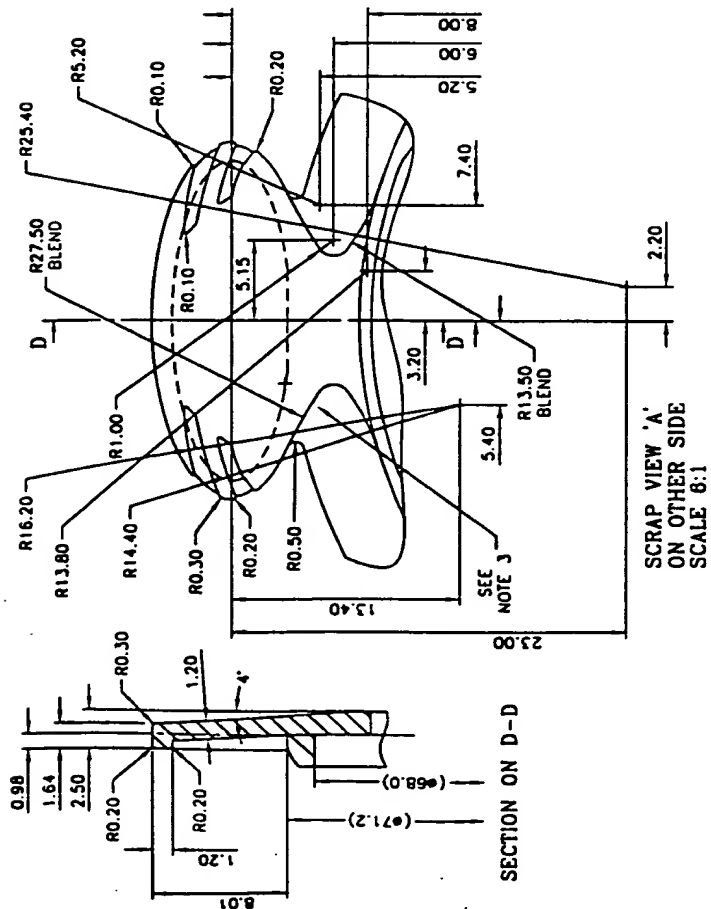
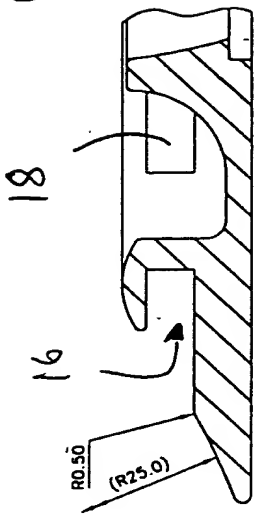
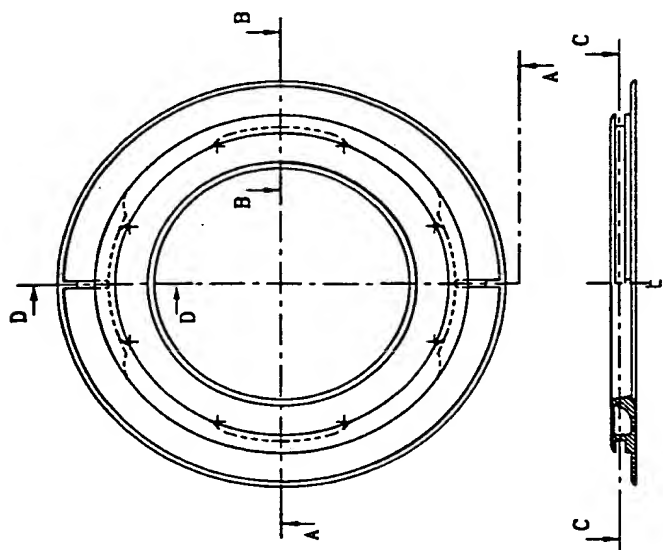
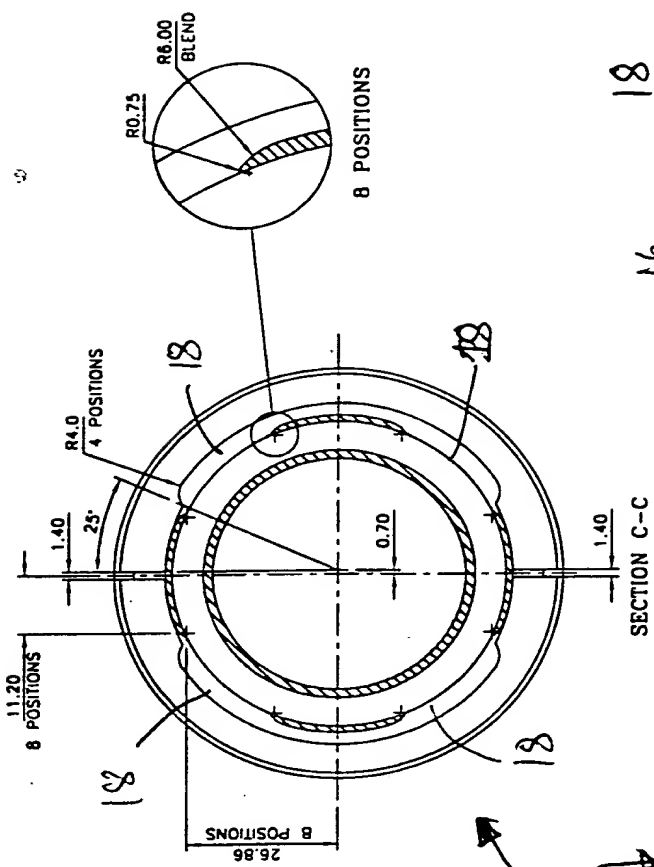


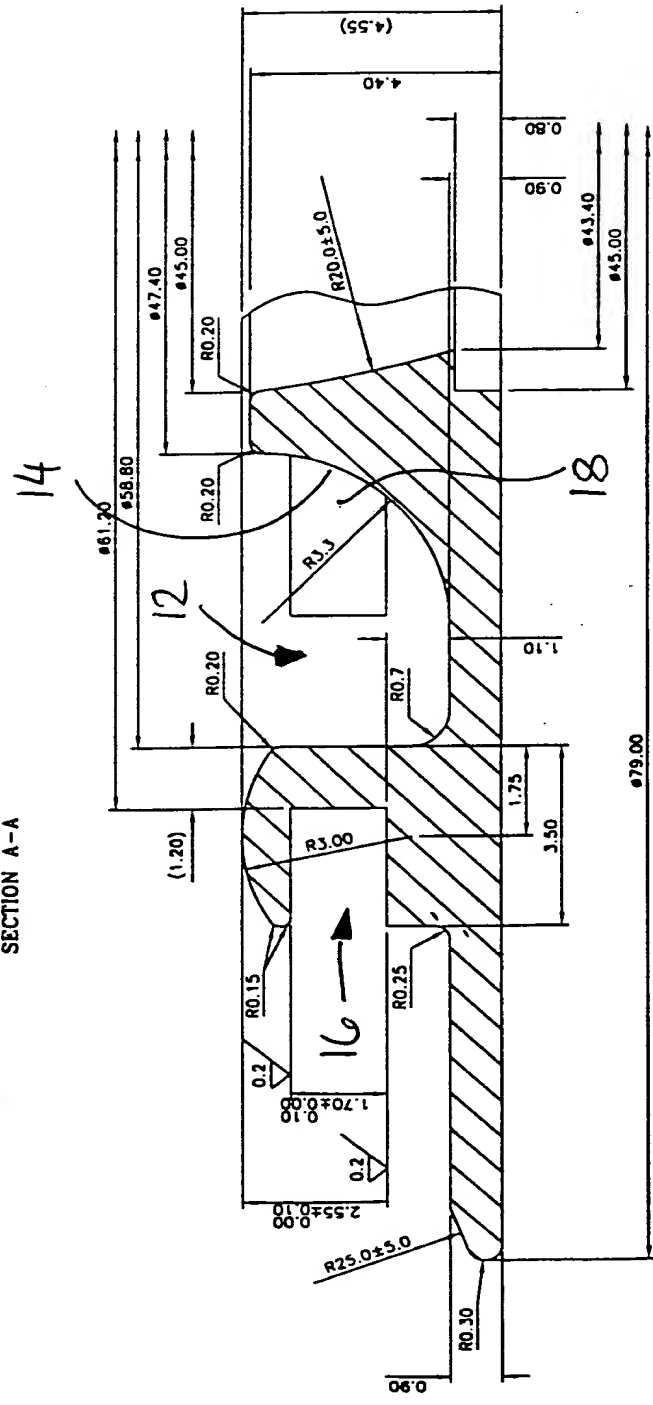
Fig. 2



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SECTION D-D  
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SECTION B-B

Fig. 3

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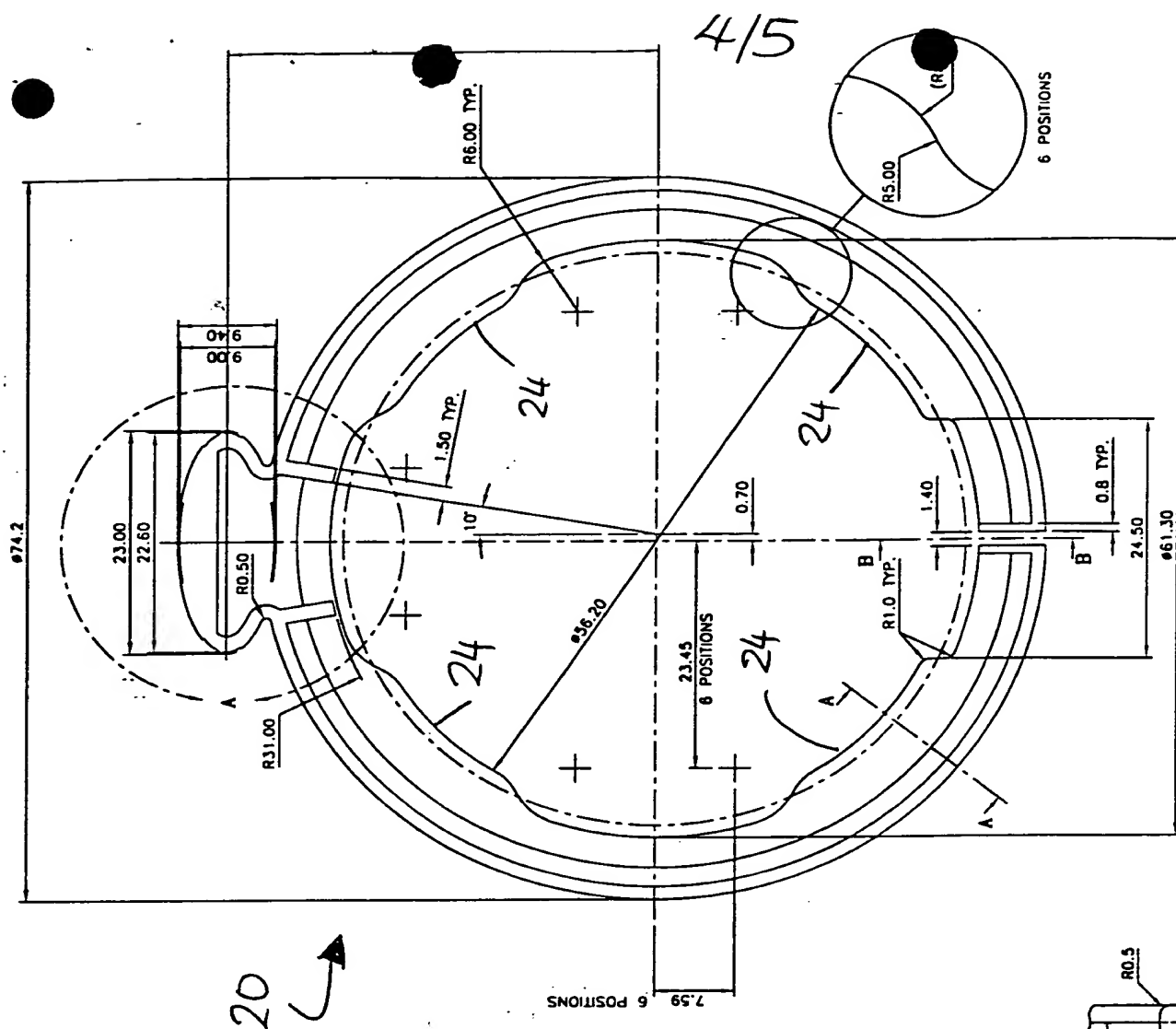
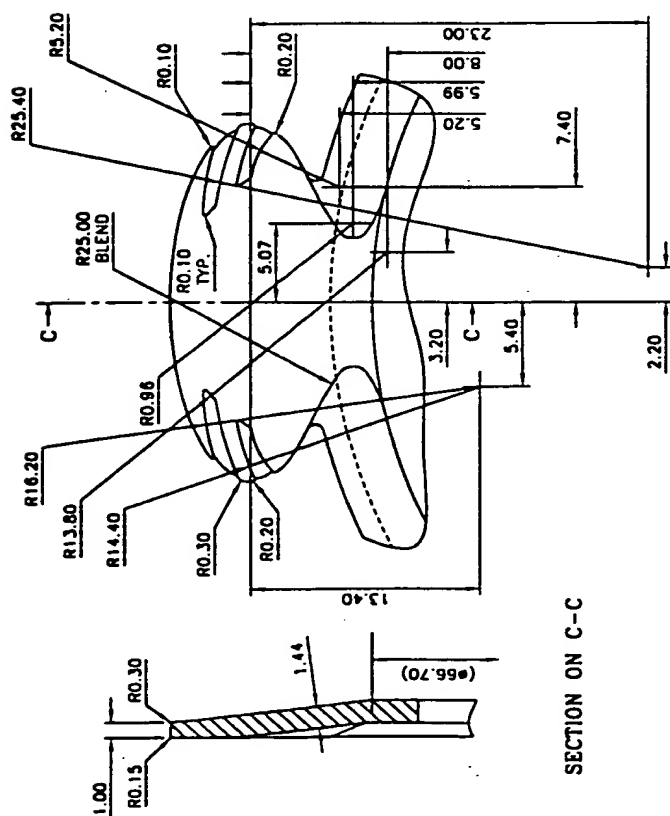
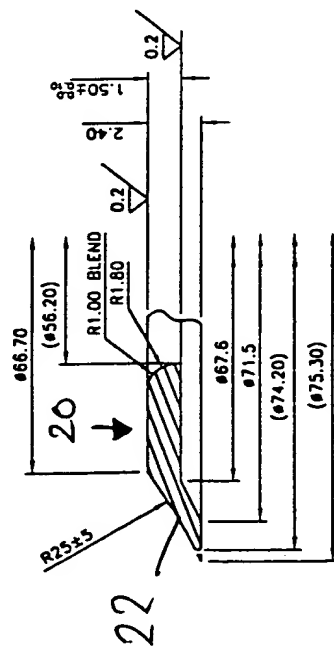
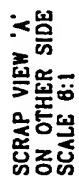


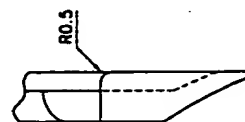
Fig. 4



## SECTION ON C-C



**SECTION A-A**  
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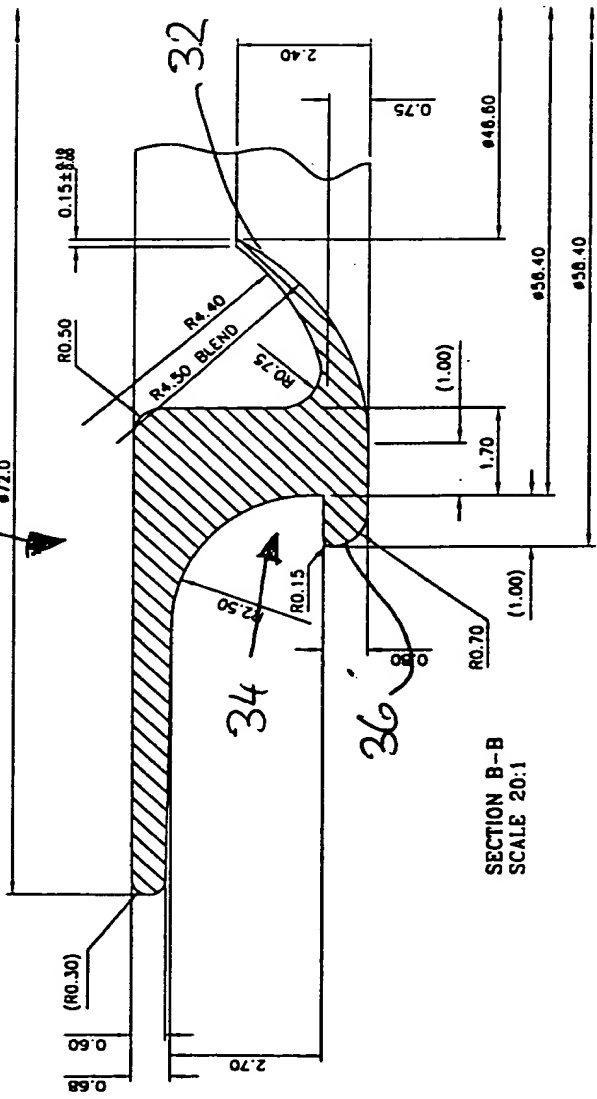
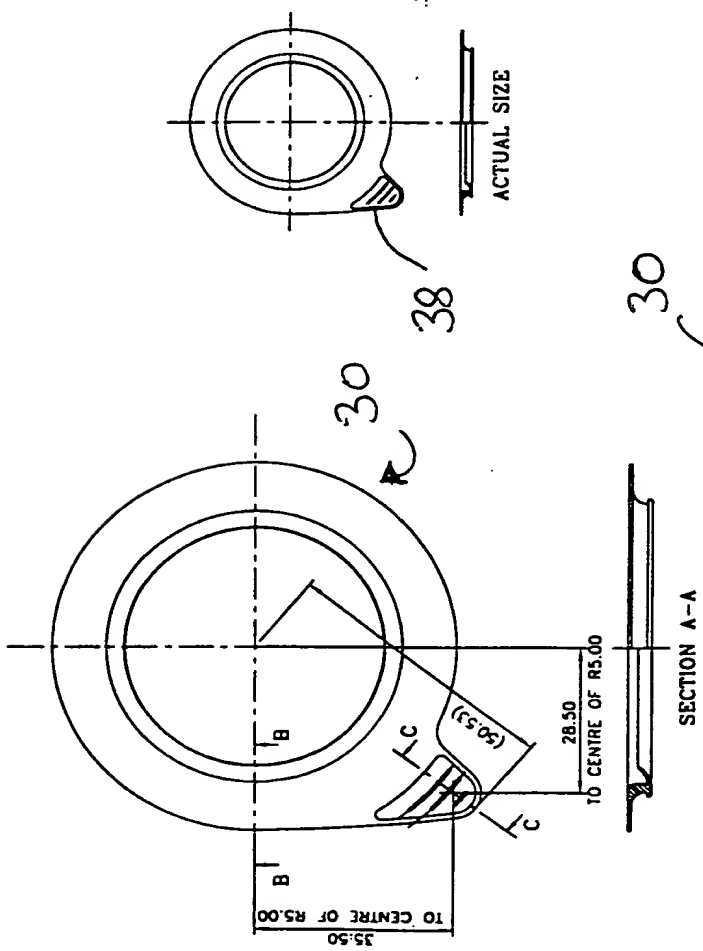
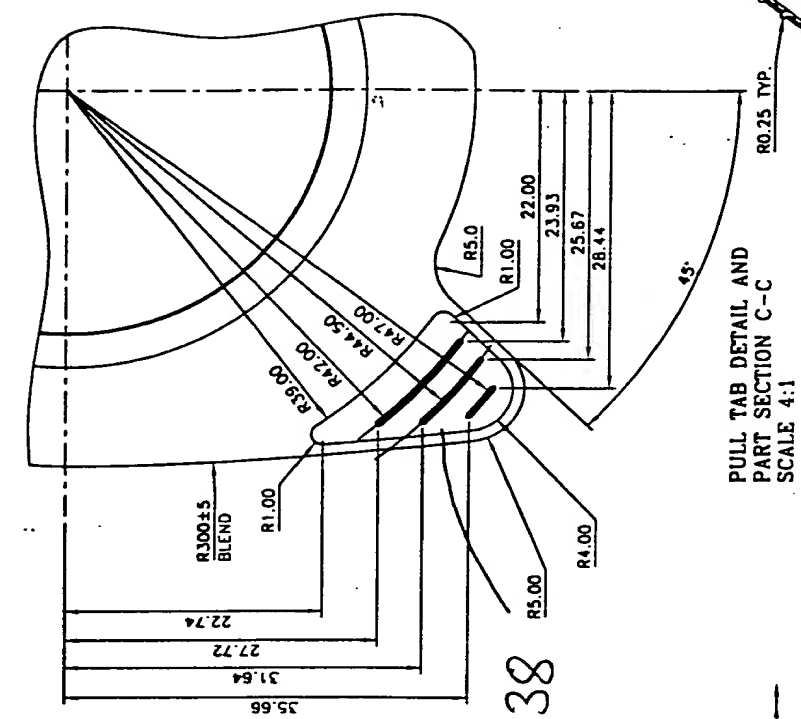


**SECTION B-B**  
**SCALE 8:1**

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Fig. 5



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